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Dealing with drought...

Nitrogen applied to fall pastures, before rains start, increases winter forage stockpile, Kallenbach says

COLUMBIA, Mo. – Stockpiled pasture grass grown this fall, after the rains restart, can help reduce the demand for drought-shortened hay supplies, said a University of Missouri forage specialist.

“In a drought, some people think it will never rain again,” said Rob Kallenbach, with MU Extension. “They decide to not apply pasture fertilizer to give increased fall growth for winter grazing.

“Wet year or dry year, it pays to put nitrogen on pastures in August,” Kallenbach said.

“In the dry years, you may not get as much growth, but the grass that does grow is worth a lot more.”

Stockpiled fescue grass can be grazed through the winter, reducing the need for expensive hay.

Tall fescue, a cool-season grass, is the most common grass grown in Missouri pastures. Fescue has two growing seasons, with peak production in the spring. A second growth occurs when temperatures drop and fall rains return.

To increase fall stockpile, producers are urged to apply nitrogen fertilizer to the pastures in mid-August. Early application assures that the fertility will be in place when the rains start.

“Applying nitrogen after the first rain falls is always too late to get maximum growth,” Kallenbach said. “We have four years of research at the MU Forage Systems Research Center at Linneus, Mo. That shows the value of fertilizing every fall.

“The economic return is about the same, whether it is a normal year or a drought.”

It just takes more nerve to add the expense of fertilizer when pastures are dried out, Kallenbach said. “But, it always rains after a drought.”

Even if nitrogen is not used until next spring, the fertility will produce much needed grass, Kallenbach said. “Nitrogen on pasture is very stable and will stay in place.”

The amount of nitrogen to apply depends on the soil depth and water holding capacity of the soil under the pasture, Kallenbach said. At Linneus (in north central Missouri), the MU research farm has deep, fertile soil. “We put on 80 pounds of nitrogen per acre on good soils. In the Ozarks, we would cut that back to 40 pounds per acre.”

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